



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/470,982	12/23/1999	DAE-HYUK SHIM	DR-001	6849

7590 03/17/2003
Fleshner & Kim, LLP
14500 Avion Parkway
Suite 125
Chantilly, VA 20151

EXAMINER

NGUYEN, PHUONGCHAU BA

ART UNIT PAPER NUMBER

2665

DATE MAILED: 03/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/470,982

Applicant(s)

SHIM, DAE-HYUK

Examiner

Phuongchau Ba Nguyen

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,11,12,21,22 and 30 is/are rejected.
- 7) ☒ Claim(s) 2-10,13-20,23-29 and 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Claim Rejections – 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Colton (3,985,967).

Regarding claims 1, 30 :

Colton (3,985,967) discloses a reframer, comprising:

a first circuit (framing detector 20) that detects a frame start point of input data based on a frame alignment signal defined in a framed data of a digital hierarchy signal {col.7, lines 16–27}.

Art Unit: 2665

a second circuit (reframer 30) that excludes (col.21, line 68–col.22, lines 1–4) the input data having an improper start point based on a frame start point detecting value, and that outputs (col.12, lines 62–67) reframed data having a normal frame format.

3. Claims 11, 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Chopping (6,442,163)

Regarding claim 11:

Chopping (6,442,163) discloses an apparatus (cell frame aligner) for checking a loss of frame, comprising;

a first circuit (depacketizer, fig.2) that detects a frame alignment signal in a framed data of a digital hierarchy signal {col.2, lines 13–22}; and

a second circuit (a frame alignment signal detector) that checks whether the framed data is normal, and provides a releasing state according to a checking result {col.2, lines 27–32}.

Regarding claim 21:

Chopping further discloses a third circuit that outputs a state indication signal (loss of frame alignment signal; fig.2).

Claim Rejections – 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chopping (6,442,163) in view of Colton (3,985,967).

Regarding claim 12:

Chopping does not explicitly disclose the claimed features. However, in the same field of endeavor, Colton discloses a detector (frame detector 20) that checks first constant bits inputted on a frame start pulse location of the framed data, and generates one of a releasing enable signal or a declaring enable signal based on the first constant bits {col.7, lines 16-27}. Therefore, it would

Art Unit: 2665

have been obvious to an artisan to apply Colton's teaching into Chopping's system and the motivation being to determine whether the receiving frame is in-frame or out-of-frame thus would initiate the reframer for recapture the synchronization.

6. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Colton (3,985,967) in view of Wadman (5,528,579).

Colton (3,985,967) discloses a reframer, comprising:

a first circuit (framing detector 20) that detects a frame start point of input data based on a frame alignment signal defined in a framed data of a digital hierarchy signal {col.7, lines 16-27}.

a second circuit (reframer 30) that excludes (col.21, line 68-col.22, lines 1-4) the input data having an improper start point based on a frame start point detecting value, and that outputs (col.12, lines 62-67) reframed data having a normal frame format.

Colton does not explicitly disclose the claimed features. However, in the same field of endeavor, Wadman (5,528,579) discloses a framer alignment 442

Art Unit: 2665

in DS1U 400 (col.8, lines 30–32) connected to a RU 600 having a RU framer 604 (col.7, lines 27–29) which locates and aligns RU 600 to the downstream NBS {col.7, lines 21–23}; wherein a loss of frame checking 400 apparatus coupled to the reframer 604 and included a third circuit 442 that detects the frame alignment signal in the reframed data, and a fourth circuit 444 that checks whether the reframed data has a normal frame format (i.e., N-OOF=0, fig.7), and provides a releasing state according to the checking result {fig.7; also col.10, lines 42–58}. Therefore, it would have been obvious to an artisan to apply Wadman's teaching to Colton's system and the motivation being to reinforce framing alignment.

Allowable Subject Matter

7. Claims 2–10, 13–20, 23–29, 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2665

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchau Ba Nguyen whose telephone number is 703-305-0093. The examiner can normally be reached on Monday-Friday 10:00AM-3:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 703-308-6602. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.



Phuongchau Ba Nguyen
Examiner
Art Unit 2665

March 10, 2003

